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INSECT SURVEY PROGRAM
Reports
Aerial Survey

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2
Control
Insect
Challis

CHALLIS NATIONAL FOREST

Annual Aerial Survey

August 22, 24 and on September 1, 1956

by

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Entomologists

An aerial survey of the Challis National Forest was conduoted between August 22 to 24 and on September 1, 1956. The purpose of the examination was to detect, locate, and describe the evidence of unusual forest insect activity. Such an aerial survey also aids in planning ground coverage by revealing the danger spots.

The spruce budworm is the most prominent pest at this time. Three degrees of intensity of damage were used on the aerial work with budworm: light, medium, and heavy defoliation. This was based on current year defoliation. A ground appraisal survey covering the spruce budworm situation has been reported separately[2/].

Bark beetle damage was also observed and recorded during the aerial survey. In the case of most bark beetles the aerial detection reveals only the damage of the previous year's attacks and not the new infestations. In some cases there may be fading of foliage during the season of attacks. Generally, ground work is required to determine the current status of bark beetle infestations.

It is planned to make yearly aerial examinations of the forest to observe the general conditions and possible dangerous situations in the early stages of development. Observations by Challis National Forest personnel during the year will also aid in improving our system of detection.

The attached map shows the flight lines followed during the aerial survey and the centers of infestation as mapped. A description of each area is keyed out on the map with brief statements on the insect species involved.

1/Forestry Aid - Research

2/Cole, W. E. 1956. Spruce Budworm in South Idaho with Special Reference to Surveys. Mimeo. IF&RES. F.S. Ogden, Utah

TM FILE COPY

Area A.
This area lies between the Middle Fork of the Salmon River and Little Soldier Mountain and between Rapid River and Little Loon Creek. There are approximately 22,250 acres of medium budworm defoliation within this area. This infestation is probably in its second year of existence.

Areas B, C, D, E, F, and G.
There are six areas of 1955 bark beetle damage within the Loon Creek drainage. However, each area is small, containing approximately 5 to 15 beetle-killed trees each. Areas D and G are areas of Douglas-fir bark beetle damage, while the remaining areas contain fir engraver damage in alpine fir.

Area H.
The heaviest concentration of fir engraver damage on the Challis N. F. is located in this area. Even so, only about 45 to 50 trees were located near the head of Beaver Creek which may be considered endemic.

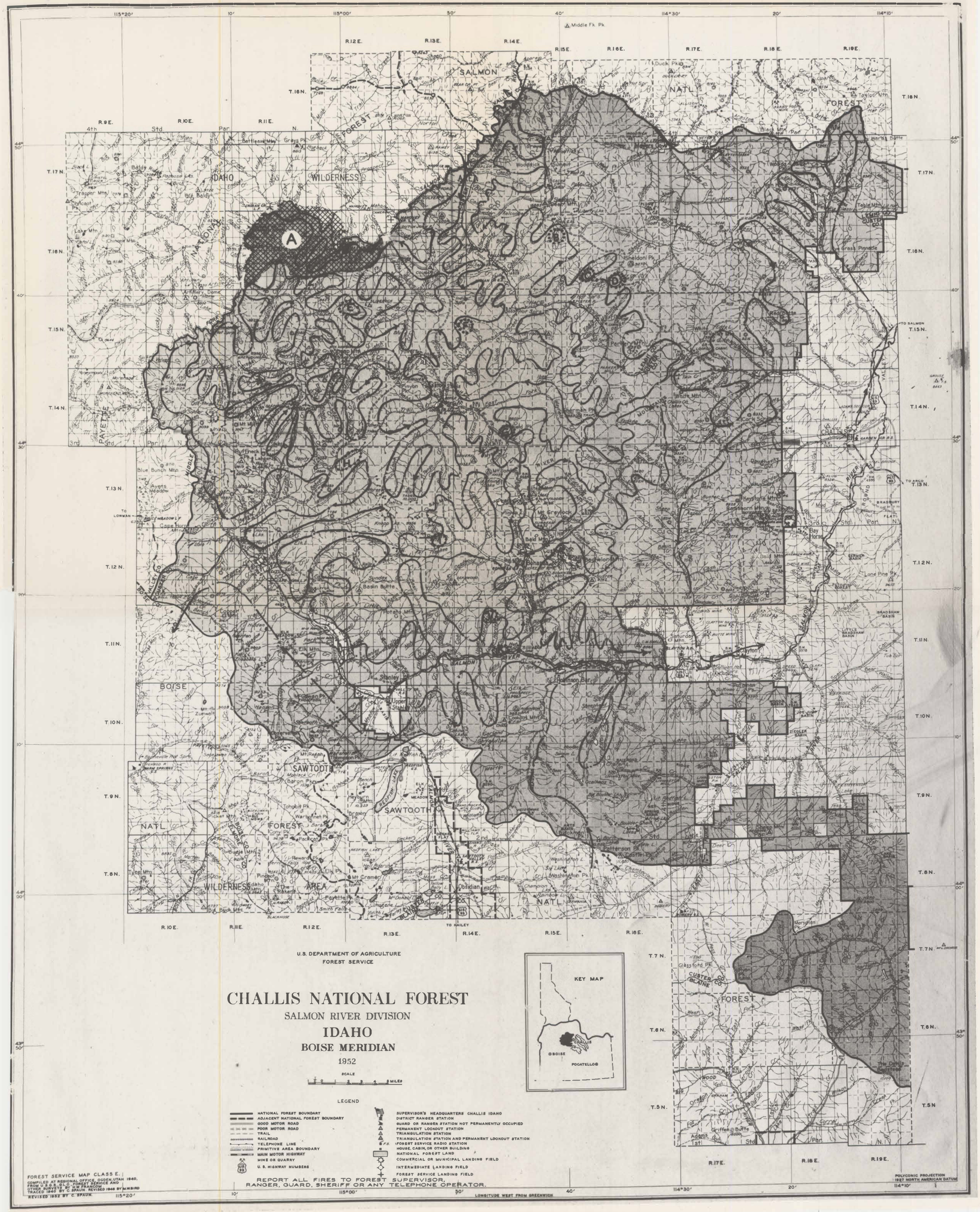
Areas I, J, and K.
Areas I and J each contain about 10 to 15 alpine fir-killed trees and K about 5 to 10 Douglas-fir-killed trees.

SUMMARY

The spruce budworm has increased in 1956. This area borders some 87,000 acres in Indian Creek on the Boise National Forest.

The Douglas-fir bark beetle appears to be static for 1956 in its intensity of damage.

The alpine fir engraver beetle has increased slightly in activity over the 1955 damage.


A
WILDERNESS
AREA
IDAHO
SALMON
NATL
FOREST
SAWTOOTH
BOISE
PAYETTE
NATIONAL
FOREST
NATL
FOREST
WILDERNESS
AREA
SAWTOOTH
NATL
FOREST
CHALLIS NATIONAL FOREST
SALMON RIVER DIVISION
IDAHO
BOISE MERIDIAN
1952
U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
KEY MAP
SCALE
MILES
LEGEND
NATIONAL FOREST BOUNDARY
ADJACENT NATIONAL FOREST BOUNDARY
GOOD MOTOR ROAD
POOR MOTOR ROAD
TRAIL
RAILROAD
TELEPHONE LINE
PRIMITIVE AREA BOUNDARY
MAIN MOTOR HIGHWAY
MINE OR QUARRY
U. S. HIGHWAY NUMBERS
SUPERVISOR'S HEADQUARTERS CHALLIS IDAHO
DISTRICT RANGER STATION
GUARD OR RANGER STATION NOT PERMANENTLY OCCUPIED
PERMANENT LOOKOUT STATION
TRIANGULATION STATION
TRIANGULATION STATION AND PERMANENT LOOKOUT STATION
FOREST SERVICE RADIO STATION
HOUSE, CABIN, OR OTHER BUILDING
NATIONAL FOREST LAND
COMMERCIAL OR MUNICIPAL LANDING FIELD
INTERMEDIATE LANDING FIELD
FOREST SERVICE LANDING FIELD
REPORT ALL FIRES TO FOREST SUPERVISOR,
RANGER, GUARD, SHERIFF OR ANY TELEPHONE OPERATOR.
FOREST SERVICE MAP CLASS E.
COMPILED AT REGIONAL OFFICE, OGDEN, UTAH 1940.
FROM U.S. G.L.O. FOREST SERVICE AND
PUBLIC SURVEYS BY H.W. FRANCOM
TRACED 1940 BY C. SPAUN. REVISED 1946 BY M.W.BIRD
REVISED 1952 BY C. SPAUN.
POLYCONIC PROJECTION
1927 NORTH AMERICAN DATUM
LONGITUDE WEST FROM GREENWICH
115°20'
115°00'
114°30'
114°10'
R.9E.
R.10E.
R.11E.
R.12E.
R.13E.
R.14E.
R.15E.
R.16E.
R.17E.
R.18E.
R.19E.
T.18N.
T.17N.
T.16N.
T.15N.
T.14N.
T.13N.
T.12N.
T.11N.
T.10N.
T.9N.
T.8N.
T.7N.
T.6N.
T.5N.
44°30'
44°00'
43°30'
Middle Fk. Pk.
Duck Pk.
Taylor Mtn.
Horse Butte
Table Mtn.
Grass Pinnacle
Sheldon Pk.
Trapper Mtn.
Chinook Mtn.
Lake Mtn.
Baldy
Artillery Dome
Bellbeare Mtn.
Greys Pk.
Blind Mtn.
Woodrick
Wildhorse Mtn.
Blue Bunch Mtn.
Ayers Meadow
Cape Horn
Ein Mtn.
Basin Butte
Stanley
Upper Stanley Basin
Mt. Heyburn
Sawtooth Mtn.
Baron Peak
Tohobit Pk.
Warbonnet Pk.
Cony Pk.
Packer Pk.
Pinyon Pk.
Mt. Cramer
Obsidian
Washington Pk.
Patterson Pk.
Merryfield Pk.
Glasstord Pk.
Lone Pine Pk.
Griffen Butte
Saturday Mtn.
Clayton
Keystone Mtn.
Bayhorse
Mt. Greylock
Bell Mtn.
Bonanza Mtn.
Forgety Mtn.
Yuba
Smiley Mtn.
Mt. Regan
Yost Mtn.
Pinyon Pk.
Smith Falls
Blackhouse
Big Back Mtn.
Picket Mtn.
Bayhorse
Challis
Garden Gulch
Morgan Gulch
Bradbury Flat
Bradshaw Basin
Little Bradshaw Basin
Stickler Basin
Dry Basin
Jay Hawk Basin
Wood Gulch
Graham R.
Adams Gulch
Loon Creek
Middle Fork
Main Salmon River
Yellowpine
Stibnite
Thunder Mtn.
Big Creek
Chamberlain Basin
Indian Creek
Marble Creek
Bear Valley Creek
Warm Springs Creek
Boulder Creek
Yankee Fork
Valley Creek
Herd Creek
Pahsimeroi River
Lemhi River
Salmon River
Middle Fork
South Fork
Main Salmon
Payette River
North Fork
Boise River
Middle Fork
South Fork
Wood River
Big Wood River
Camas Creek
Little Wood River
Big Lost River
Little Lost River
Birch Creek
Medicine Lodge Creek
Beaver Creek
Lemhi Range
Lost River Range
Pioneer Mts.
Sawtooth Range
Boulder Mts.
Smoky Mts.
Soldier Mts.
Sawtooth Lake
Redfish Lake
Alturas Lake
Petit Lake
Pettit Lake
Yellowpine Basin
Stibnite Basin
Thunder Basin
Big Creek Basin
Chamberlain Basin
Indian Creek Basin
Marble Creek Basin
Bear Valley Basin
Warm Springs Basin
Boulder Basin
Yankee Fork Basin
Valley Creek Basin
Herd Creek Basin
Pahsimeroi Basin
Lemhi Basin
Salmon River Basin
Middle Fork Basin
South Fork Basin
Payette River Basin
North Fork Basin
Boise River Basin
Middle Fork Basin
South Fork Basin
Wood River Basin
Big Wood River Basin
Camas Creek Basin
Little Wood River Basin
Big Lost River Basin
Little Lost River Basin
Birch Creek Basin
Medicine Lodge Creek Basin
Beaver Creek Basin
Lemhi Range
Lost River Range
Pioneer Mts.
Sawtooth Range
Boulder Mts.
Smoky Mts.
Soldier Mts.
Sawtooth Lake
Redfish Lake
Alturas Lake
Petit Lake
Pettit Lake
TO SALMON
TO ARCO
TO LOWMAN
TO HAILEY
BOISE
POCATELLO
The Devils Bedstead
Lone Pine Pk.
Griffen Butte
Saturday Mtn.
Clayton
Keystone Mtn.
Bayhorse
Mt. Greylock
Bell Mtn.
Bonanza Mtn.
Forgety Mtn.
Yuba
Smiley Mtn.
Mt. Regan
Yost Mtn.
Pinyon Pk.
Smith Falls
Blackhouse
Big Back Mtn.
Picket Mtn.
Bayhorse
Challis
Garden Gulch
Morgan Gulch
Bradbury Flat
Bradshaw Basin
Little Bradshaw Basin
Stickler Basin
Dry Basin
Jay Hawk Basin
Wood Gulch
Graham R.
Adams Gulch
Loon Creek
Middle Fork
Main Salmon River
Yellowpine
Stibnite
Thunder Mtn.
Big Creek
Chamberlain Basin
Indian Creek
Marble Creek
Bear Valley Creek
Warm Springs Creek
Boulder Creek
Yankee Fork
Valley Creek
Herd Creek
Pahsimeroi River
Lemhi River
Salmon River
Middle Fork
South Fork
Main Salmon
Payette River
North Fork
Boise River
Middle Fork
South Fork
Wood River
Big Wood River
Camas Creek
Little Wood River
Big Lost River
Little Lost River
Birch Creek
Medicine Lodge Creek
Beaver Creek
Lemhi Range
Lost River Range
Pioneer Mts.
Sawtooth Range
Boulder Mts.
Smoky Mts.
Soldier Mts.
Sawtooth Lake
Redfish Lake
Alturas Lake
Petit Lake
Pettit Lake